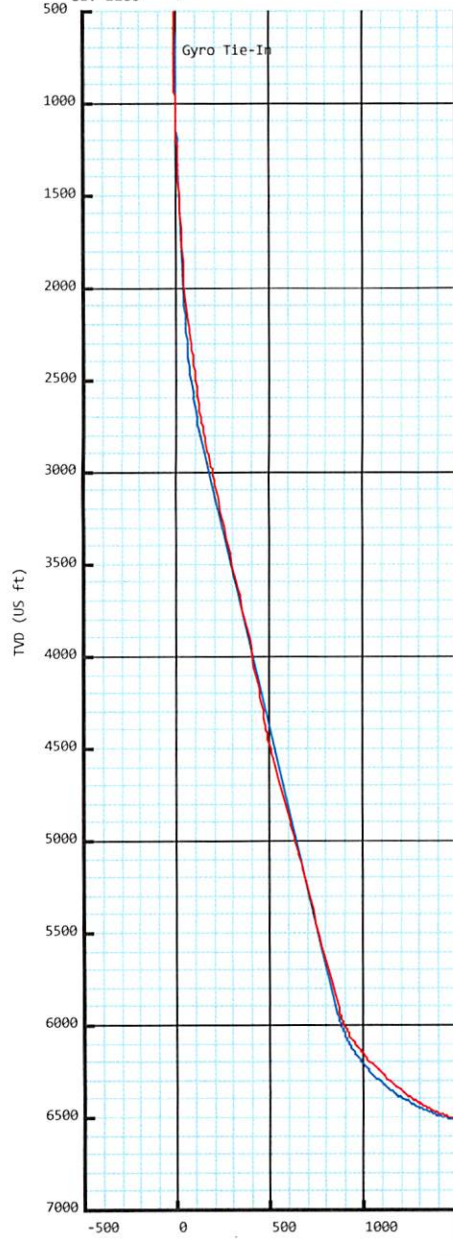




William Rodgers OHI 605H  
Ohio County, WV  
SDC 40

KB: 1306'  
GL: 1280'



Plan Data for William Rodgers OHI 605H

Plan Point Information:									
Dogleg	Severity	Unit:	°/100.00ft						
MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	Comments
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	
0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00	0.0	0.0
26.00	0.00	0.00	26.00	-0.00	-0.00	0.00	0.00	0.0	KB Offset
600.00	0.00	0.00	600.00	-0.00	-0.00	0.00	0.00	0.0	Nudge KOP
1350.00	15.00	80.00	1341.46	16.95	96.13	16.31	2.00	80.0	Hold
2083.53	15.00	80.00	2050.00	49.92	283.10	48.04	0.00	0.0	Build/Turn
3079.04	34.50	69.59	2950.00	171.85	678.18	167.35	2.00	342.5	Hold Tangent
6715.02	34.50	69.59	5946.59	890.13	2608.31	872.81	0.00	0.0	Curve KOP 7° DLS
7561.76	70.00	5.08	6489.61	1417.97	2894.26	1398.75	7.00	279.3	Build/Turn 9° DLS
7947.14	90.46	336.49	6556.00	1786.34	2831.52	1767.52	9.00	302.8	Landing Point
14006.62	90.46	336.49	6507.00	7342.67	414.48	7339.76	0.00	0.0	PBHL WR605H

Target Set Information:

Name: William Rodgers 605H

Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat	Long
	(USft)	(USft)	(USft)	(USft)	(USft)	(°)	(°)
LP WR605H	6556.00	1786.45	2831.48	14567774.91	1774058.50	40.111720	-80.522016
PBHL WR605H	6507.00	7342.67	414.48	14573331.13	1771641.50	40.127013	-80.530555

Plan Data for William Rodgers OHI 605H

Field: SOUTHWESTERN\_OHIO CO, WV UTM NAD 83 (17N)  
Map Unit: USFT Vertical Reference Datum (VRD): Mean Sea Level  
Projected Coordinate System: NAD83 / UTM zone 17N

Site: William Rodgers Pad  
Unit: USFeet TVD Reference:  
Company Name: SOUTHWESTERN ENERGY  
Position: Northing: 14566030.37USft Latitude: 40.106971°  
Easting: 1771224.60USft Longitude: -80.532184°  
North Reference: Grid Grid Convergence: 0.30°  
Elevation Above VRD: 1280.00USft

Slot: William Rodgers OHI 605H  
Position:  
Offset is from Site centre  
+N/-S: -41.91USft Northing: 14565988.46USft Latitude: 40.106856°  
+E/-W: 2.42USft Easting: 1771227.02USft Longitude: -80.532176°  
Elevation Above VRD: 1280.00USft

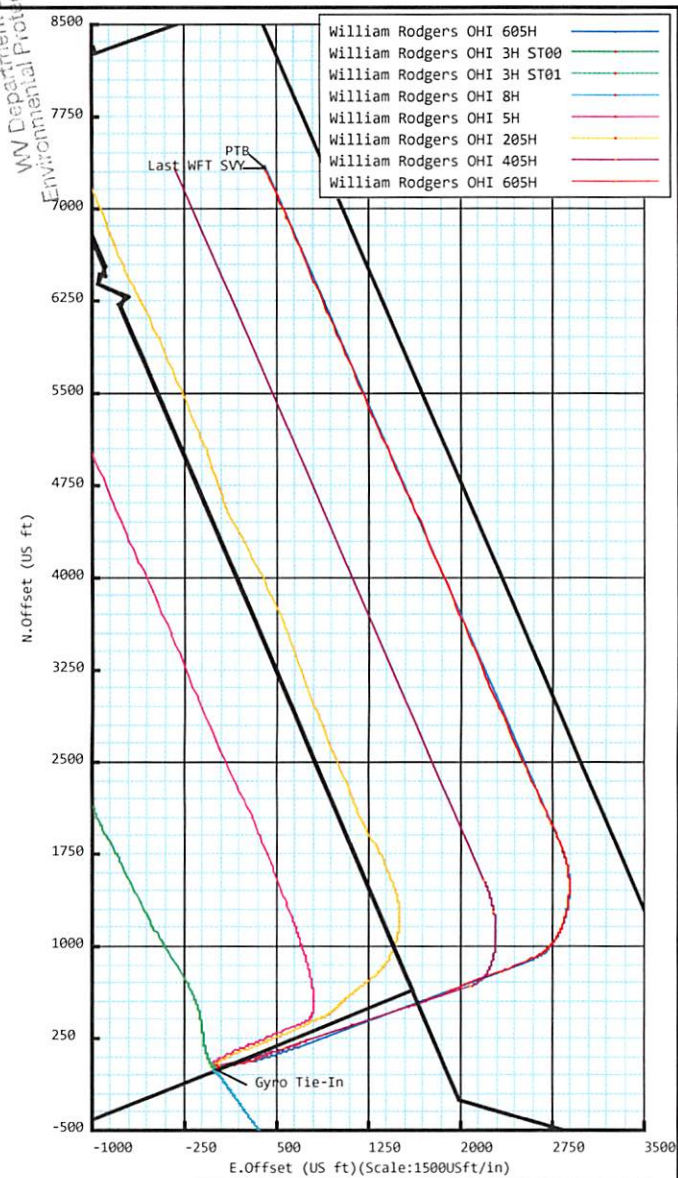
Well: William Rodgers OHI 605H  
Type: Main-Well  
File Number:

Plan Folder: P1 Plan: P1:V4  
Vertical Section: Position offset of origin from Slot centre:  
+N/-S: -0.00USft Azimuth: 359.62°  
+E/-W: -0.00USft  
Magnetic Parameters:  
Model: Field Strength: Declination: Dip: Date:  
HDGM 52793(nT) -8.45° 67.52° 2017-07-31



Drawing By: GWR Date: 08/29/2017  
Weatherford Drilling Services  
7725 W. Reno, Ste. #220  
Oklahoma City, OK 73127  
+1.405.773.1100 Main  
+1.405.773.1887 Fax

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True Mag Grid  
Grid Convergence: 0.30°  
Mag Declination: -8.45°  
Bearing:  
True = Mag - 8.45°  
Grid = True - 0.30°  
Total Correction to Grid North -8.75°

PTB  
Last WFT SVY

VS (US ft)(Bearing:359.62° Scale:1000USft/in)

**5D Survey Report****SOUTHWESTERN ENERGY**

**Field Name:** *SOUTHWESTERN\_OHIO CO, WV UTM NAD 83 (17N)*  
**Site Name:** *William Rodgers Pad*  
**Well Name:** *William Rodgers OHI 605H*  
**Survey:** *Definitive survey*

9 September 2017

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# Weatherford®

## William Rodgers OHI 605H

<b>Field Name:</b> SOUTHWESTER N_OHIO CO, WV UTM NAD 83 (17N)	<b>Map Units:</b> US ft	<b>Company Name:</b> SOUTHWESTERN ENERGY
	<b>Vertical Reference Datum (VRD):</b> Mean Sea Level	
	<b>Projected Coordinate System:</b> NAD83 / UTM zone 17N	
<b>Comment:</b>		

<b>Site:</b> William Rodgers Pad	<b>Units:</b> US ft	<b>North Reference:</b> Grid	<b>Convergence Angle:</b> 0.30
	<b>Position:</b>	<b>Northing:</b> 14566030.37 US ft	<b>Latitude:</b> 40° 6' 25.10"
		<b>Easting:</b> 1771224.60 US ft	<b>Longitude:</b> -80° 31' 55.86"
<b>Elevation above MSL:</b> 1280.00 US ft		<b>Comment:</b>	

<b>Slot:</b> William Rodgers OHI 605H	<b>Position (Relative to Site Centre)</b>		
	<b>+N/-S:</b> -41.91 US ft	<b>Northing:</b> 14565988.46 US ft	<b>Latitude:</b> 40°6'24.68"
	<b>+E/-W:</b> 2.42 US ft	<b>Easting:</b> 1771227.02 US ft	<b>Longitude:</b> -80°31'55.83"
<b>Elevation above MSL:</b> 1280.00 US ft		<b>Comment:</b>	

<b>Well:</b> William Rodgers OHI 605H	<b>Type:</b> Main well	<b>UWI:</b>	
	<b>File Number:</b>	<b>Comment:</b>	
	<b>Closure Distance:</b> 7347.12 US ft	<b>Closure Azimuth:</b> 3.14°	
<b>Vertical Section: Position of Origin (Relative to Slot centre)</b>			
	<b>+N/-S:</b> -0.00 US ft	<b>+E/-W:</b> -0.00 US ft	<b>Az:</b> 3.23°

<b>Drill floor:</b>	<b>Survey Name:</b> Definitive Survey		
<b>Rig Height (Drill Floor):</b> 26.00 US ft	<b>Elevation above MSL:</b> 1306.00 US ft	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°

<b>Survey Name:</b> Definitive Survey			
<b>Date:</b> 04/Nov/2015	<b>Survey Tool:</b> See Survey Tool Ranges below.	<b>Comment:</b>	<b>Company:</b>
<b>Magnetic Model:</b>			
<b>Model Name:</b> HDGM	<b>Date:</b> 31/Jul/2017	<b>Field Strength:</b> 52793.0nT	<b>Declination:</b> -8.45° <b>Dip:</b> 67.52°
<b>Tie Point:</b>			
<b>MD:</b> 0.00 US ft	<b>Inclination:</b> 0.00°	<b>Azimuth:</b> 0.00°	<b>TVD:</b> 0.00 US ft
			<b>North Offset:</b> -0.00 US ft
			<b>East Offset:</b> -0.00 US ft

<b>Survey Tool Ranges:</b>			
Name	Start MD(USFt)	End MD(USFt)	Source Survey
GYRO-NS_OW	0.00	421.00	Gyro_01
GYRO-NS_OW	421.00	735.00	Gyro_02
MFAC_US_V2	735.00	826.00	WFT MWD_01-MFAC
MWD	826.00	2034.00	WFT MWD_01-MWD
MWD	2034.00	5441.00	WFT MWD_03

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## 5D Survey Report

Survey Tool Ranges:			
Name	Start MD(USft)	End MD(USft)	Source Survey
MWD	5441.00	13984.00	WFT MWD_04

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (%/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	14565988.46	1771227.02	0.00	
100.00	0.55	148.76	100.00	-0.40	-0.41	0.25	14565988.05	1771227.27	0.55	
205.00	1.44	154.94	204.98	-1.97	-2.04	1.07	14565986.42	1771228.09	0.85	
265.00	0.98	163.42	264.97	-3.12	-3.21	1.53	14565985.25	1771228.55	0.82	
296.00	0.58	147.73	295.97	-3.50	-3.60	1.69	14565984.86	1771228.71	1.45	
329.00	0.44	3.89	328.96	-3.51	-3.61	1.79	14565984.85	1771228.81	2.94	
360.00	0.43	269.72	359.96	-3.39	-3.49	1.68	14565984.97	1771228.70	2.06	
391.00	0.52	1.98	390.96	-3.26	-3.35	1.57	14565985.11	1771228.59	2.22	
421.00	0.51	290.69	420.96	-3.08	-3.17	1.45	14565985.29	1771228.47	2.00	
503.00	0.16	326.21	502.96	-2.88	-2.95	1.05	14565985.51	1771228.07	0.48	
549.00	0.24	122.32	548.96	-2.88	-2.95	1.09	14565985.51	1771228.11	0.85	
611.00	0.71	114.00	610.96	-3.08	-3.17	1.55	14565985.29	1771228.57	0.76	
700.00	1.56	97.62	699.94	-3.37	-3.56	3.26	14565984.90	1771230.28	1.01	
735.00	2.65	96.04	734.92	-3.44	-3.70	4.53	14565984.76	1771231.55	3.12	Gyro Tie-In
826.00	5.43	78.03	825.68	-2.42	-3.03	10.84	14565985.43	1771237.86	3.32	
872.00	6.42	76.95	871.44	-1.12	-2.00	15.47	14565986.46	1771242.49	2.17	
965.00	9.01	78.16	963.59	2.23	0.67	27.67	14565989.13	1771254.69	2.79	
1058.00	10.12	75.73	1055.29	6.58	4.18	42.72	14565992.64	1771269.74	1.27	
1150.00	10.91	76.30	1145.75	11.54	8.23	59.01	14565996.69	1771286.03	0.87	
1243.00	12.79	80.38	1236.76	16.40	12.04	77.71	14566000.50	1771304.73	2.21	
1336.00	12.73	78.88	1327.47	21.23	15.73	97.91	14566004.19	1771324.93	0.36	
1429.00	13.92	79.52	1417.96	26.42	19.74	118.97	14566008.20	1771345.99	1.29	
1522.00	14.96	79.46	1508.02	31.93	23.97	141.77	14566012.43	1771368.79	1.12	
1614.00	14.67	77.62	1596.97	37.89	28.64	164.82	14566017.10	1771391.84	0.60	
1707.00	15.19	77.08	1686.83	44.45	33.89	188.20	14566022.35	1771415.22	0.58	
1799.00	16.84	78.40	1775.25	51.21	39.27	213.00	14566027.73	1771440.02	1.84	
1892.00	17.49	79.15	1864.11	58.06	44.61	239.93	14566033.07	1771466.95	0.74	
1984.00	17.62	77.41	1951.83	65.22	50.24	267.09	14566038.70	1771494.11	0.59	
2034.00	17.59	76.32	1999.48	69.48	53.68	281.82	14566042.14	1771508.84	0.66	
2201.00	18.05	69.78	2158.49	87.12	68.59	330.62	14566057.05	1771557.64	1.23	
2293.00	18.68	66.28	2245.80	99.47	79.45	357.48	14566067.91	1771584.50	1.38	
2386.00	18.94	61.89	2333.84	114.07	92.55	384.43	14566081.01	1771611.45	1.55	
2479.00	19.94	69.84	2421.55	128.22	105.13	412.64	14566093.59	1771639.66	3.04	
2571.00	22.18	74.11	2507.41	140.14	115.29	444.07	14566103.75	1771671.09	2.95	
2664.00	25.11	71.77	2592.59	153.11	126.27	479.71	14566114.73	1771706.73	3.31	
2756.00	27.63	72.65	2675.01	167.75	138.74	518.62	14566127.20	1771745.64	2.77	
2849.00	30.52	72.49	2756.29	183.70	152.28	561.73	14566140.74	1771788.75	3.11	
2942.00	32.83	71.08	2835.43	201.57	167.56	608.11	14566156.02	1771835.13	2.61	
3034.00	33.38	68.62	2912.50	221.51	184.88	655.27	14566173.34	1771882.29	1.58	
3124.00	33.59	66.50	2987.56	243.02	203.83	701.15	14566192.29	1771928.17	1.32	
3217.00	33.45	71.28	3065.11	264.18	222.32	749.03	14566210.78	1771976.05	2.84	
3310.00	33.76	72.92	3142.57	282.73	238.13	798.01	14566226.59	1772025.03	1.03	
3402.00	33.80	71.97	3219.04	300.88	253.56	846.78	14566242.02	1772073.80	0.58	
3495.00	33.99	73.00	3296.23	319.25	269.17	896.23	14566257.63	1772123.25	0.65	
3588.00	34.75	72.59	3373.00	337.59	284.70	946.39	14566273.16	1772173.41	0.85	
3680.00	35.59	71.42	3448.20	356.78	301.08	996.78	14566289.54	1772223.80	1.17	
3773.00	36.08	70.74	3523.60	377.31	318.73	1048.29	14566307.19	1772275.31	0.68	
3866.00	35.97	70.45	3598.81	398.36	336.91	1099.88	14566325.37	1772326.90	0.22	
3959.00	33.98	71.13	3675.01	418.71	354.45	1150.21	14566342.91	1772377.23	2.18	
4051.00	34.21	70.95	3751.20	438.19	371.21	1198.98	14566359.67	1772426.00	0.27	
4144.00	33.76	69.99	3828.31	458.30	388.58	1247.98	14566377.04	1772475.00	0.75	
4237.00	33.07	71.18	3905.94	478.02	405.61	1296.28	14566394.07	1772523.30	1.02	

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## 5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (%/100US ft)	Comment
4329.00	31.66	71.88	3983.65	496.24	421.22	1342.98	14566409.68	1772570.00	1.59	
4422.00	32.02	72.60	4062.65	513.81	436.18	1389.71	14566424.64	1772616.73	0.56	
4515.00	32.05	72.49	4141.49	531.24	450.98	1436.77	14566439.44	1772663.79	0.07	
4607.00	30.31	71.85	4220.20	548.35	465.56	1482.11	14566454.02	1772709.13	1.93	
4700.00	31.94	72.14	4299.81	565.76	480.41	1527.83	14566468.87	1772754.85	1.76	
4793.00	33.75	73.65	4377.94	583.27	495.23	1576.04	14566483.69	1772803.06	2.14	
4885.00	36.98	72.93	4452.96	601.44	510.55	1627.02	14566499.01	1772854.04	3.54	
4978.00	37.28	70.54	4527.10	622.01	528.15	1680.32	14566516.61	1772907.34	1.58	
5071.00	35.23	69.13	4602.10	643.83	547.09	1731.95	14566535.55	1772958.97	2.38	
5163.00	35.51	68.83	4677.12	665.70	566.19	1781.66	14566554.65	1773008.68	0.36	
5256.00	35.05	67.99	4753.04	688.25	585.95	1831.61	14566574.41	1773058.63	0.72	
5349.00	35.55	66.62	4828.94	711.75	606.69	1881.18	14566595.15	1773108.20	1.01	
5441.00	35.53	65.79	4903.80	736.05	628.27	1930.11	14566616.73	1773157.13	0.52	
5469.00	35.75	67.19	4926.56	743.39	634.77	1945.07	14566623.23	1773172.09	3.02	
5562.00	34.60	66.23	5002.57	767.30	655.95	1994.28	14566644.41	1773221.30	1.37	
5654.00	35.72	65.50	5077.79	791.66	677.62	2042.63	14566666.08	1773269.65	1.30	
5747.00	35.93	67.38	5153.19	816.19	699.37	2092.52	14566687.83	1773319.54	1.20	
5840.00	35.92	68.49	5228.50	839.50	719.87	2143.09	14566708.33	1773370.11	0.70	
5933.00	35.37	69.21	5304.08	861.88	739.42	2193.63	14566727.88	1773420.65	0.74	
6025.00	35.43	70.80	5379.07	882.89	757.64	2243.71	14566746.10	1773470.73	1.00	
6118.00	35.41	71.62	5454.86	903.10	775.01	2294.73	14566763.47	1773521.75	0.51	
6211.00	35.41	70.05	5530.66	923.63	792.69	2345.63	14566781.15	1773572.65	0.98	
6304.00	34.64	67.37	5606.82	945.77	812.06	2395.36	14566800.52	1773622.38	1.85	
6396.00	34.89	66.03	5682.40	969.20	832.81	2443.53	14566821.27	1773670.55	0.87	
6489.00	35.00	67.11	5758.64	993.10	853.99	2492.41	14566842.45	1773719.43	0.68	
6582.00	34.91	68.46	5834.86	1015.99	874.14	2541.73	14566862.60	1773768.75	0.84	
6675.00	35.39	68.98	5910.90	1038.21	893.57	2591.63	14566882.03	1773818.65	0.61	
6721.00	36.95	65.73	5948.04	1050.06	904.03	2616.67	14566892.49	1773843.69	5.37	
6768.00	38.81	61.92	5985.14	1064.24	916.77	2642.55	14566905.23	1773869.57	6.36	
6814.00	40.07	55.88	6020.68	1080.72	931.87	2667.53	14566920.33	1773894.55	8.78	
6860.00	41.29	50.92	6055.57	1099.93	949.74	2691.58	14566938.20	1773918.60	7.51	
6907.00	43.01	46.25	6090.42	1122.09	970.61	2715.20	14566959.07	1773942.22	7.60	
6953.00	44.71	41.59	6123.60	1146.26	993.57	2737.28	14566982.03	1773964.30	7.93	
6999.00	46.44	37.43	6155.80	1172.74	1018.91	2758.16	14567007.37	1773985.18	7.47	
7046.00	47.68	34.18	6187.82	1201.73	1046.82	2778.28	14567035.28	1774005.30	5.71	
7092.00	48.37	31.19	6218.59	1231.51	1075.60	2796.74	14567064.06	1774023.76	5.06	
7139.00	49.00	26.99	6249.63	1263.26	1106.43	2813.89	14567094.89	1774040.91	6.84	
7185.00	50.06	23.25	6279.49	1295.73	1138.11	2828.73	14567126.57	1774055.75	6.60	
7231.00	50.49	20.24	6308.89	1329.27	1170.97	2841.83	14567159.43	1774068.85	5.12	
7278.00	51.00	17.72	6338.64	1364.29	1205.38	2853.66	14567193.84	1774080.68	4.29	
7324.00	52.56	15.58	6367.10	1399.44	1240.00	2864.01	14567228.46	1774091.03	4.99	
7370.00	54.74	13.20	6394.36	1435.79	1275.88	2873.20	14567264.34	1774100.22	6.31	
7417.00	57.85	9.88	6420.45	1474.46	1314.18	2881.00	14567302.64	1774108.02	8.85	
7463.00	61.35	6.66	6443.72	1513.97	1353.44	2886.69	14567341.90	1774113.71	9.71	
7509.00	64.50	4.38	6464.66	1554.89	1394.20	2890.62	14567382.66	1774117.64	8.15	
7556.00	66.95	1.68	6483.99	1597.73	1436.97	2892.87	14567425.43	1774119.89	7.39	
7602.00	69.80	359.43	6500.94	1640.43	1479.73	2893.28	14567468.19	1774120.30	7.68	
7649.00	72.75	356.64	6516.03	1684.75	1524.20	2891.74	14567512.66	1774118.76	8.43	
7695.00	74.47	354.13	6529.01	1728.46	1568.18	2888.19	14567556.64	1774115.21	6.43	
7741.00	76.70	351.62	6540.46	1772.28	1612.38	2882.66	14567600.84	1774109.68	7.17	
7788.00	79.97	347.68	6549.97	1817.01	1657.65	2874.38	14567646.11	1774101.40	10.76	
7834.00	83.77	344.21	6556.47	1860.47	1701.80	2863.32	14567690.26	1774090.34	11.13	
7880.00	87.16	341.59	6560.11	1903.46	1745.62	2849.84	14567734.08	1774076.86	9.30	
7927.00	90.37	338.98	6561.12	1946.72	1789.85	2833.99	14567778.31	1774061.01	8.80	
7973.00	91.72	338.45	6560.28	1988.57	1832.70	2817.29	14567821.16	1774044.31	3.15	
8066.00	91.23	336.84	6557.89	2072.42	1918.68	2781.93	14567907.14	1774008.95	1.81	
8158.00	91.05	333.68	6556.06	2153.64	2002.21	2743.44	14567990.67	1773970.46	3.44	
8251.00	91.23	335.23	6554.21	2235.14	2086.10	2703.35	14568074.56	1773930.37	1.68	
8344.00	91.17	335.39	6552.26	2317.30	2170.58	2664.51	14568159.04	1773891.53	0.18	

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## 5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (%/100US ft)	Comment
8436.00	91.05	335.88	6550.48	2398.81	2254.37	2626.56	14568242.83	1773853.58	0.55	
8529.00	91.11	336.41	6548.73	2481.60	2339.41	2588.96	14568327.87	1773815.98	0.57	
8622.00	90.62	335.27	6547.32	2564.16	2424.25	2550.90	14568412.71	1773777.92	1.33	
8715.00	90.86	335.86	6546.12	2646.52	2508.91	2512.43	14568497.37	1773739.45	0.68	
8807.00	90.99	335.67	6544.64	2728.14	2592.79	2474.67	14568581.25	1773701.69	0.25	
8900.00	90.43	336.22	6543.48	2810.79	2677.71	2436.77	14568666.17	1773663.79	0.84	
8993.00	90.86	336.56	6542.44	2893.76	2762.92	2399.52	14568751.38	1773626.54	0.59	
9085.00	90.86	334.21	6541.06	2975.09	2846.54	2361.21	14568835.00	1773588.23	2.55	
9178.00	90.68	334.23	6539.81	3056.42	2930.28	2320.77	14568918.74	1773547.79	0.19	
9270.00	90.92	336.07	6538.52	3137.58	3013.75	2282.11	14569002.21	1773509.13	2.02	
9363.00	90.68	336.90	6537.22	3220.62	3099.02	2245.01	14569087.48	1773472.03	0.93	
9456.00	90.37	338.70	6536.37	3304.60	3185.12	2209.87	14569173.58	1773436.89	1.96	
9549.00	90.68	337.95	6535.52	3388.95	3271.54	2175.53	14569260.00	1773402.55	0.87	
9641.00	90.74	338.53	6534.38	3472.33	3356.97	2141.42	14569345.43	1773368.44	0.63	
9734.00	90.55	337.35	6533.33	3556.40	3443.16	2106.50	14569431.62	1773333.52	1.29	
9824.00	90.43	336.85	6532.56	3637.20	3526.06	2071.48	14569514.52	1773298.50	0.57	
9916.00	90.37	337.08	6531.92	3719.70	3610.72	2035.48	14569599.18	1773262.50	0.26	
10009.00	90.31	338.06	6531.37	3803.53	3696.69	2000.00	14569685.15	1773227.02	1.06	
10101.00	90.55	337.03	6530.68	3886.43	3781.71	1964.86	14569770.17	1773191.88	1.15	
10194.00	90.37	337.19	6529.93	3969.93	3867.38	1928.68	14569855.84	1773155.70	0.26	
10287.00	90.62	336.47	6529.13	4053.23	3952.88	1892.09	14569941.34	1773119.11	0.82	
10380.00	90.49	335.65	6528.23	4135.96	4037.87	1854.36	14570026.33	1773081.38	0.89	
10472.00	90.55	336.59	6527.39	4217.85	4121.99	1817.12	14570110.45	1773044.14	1.02	
10565.00	90.31	336.93	6526.69	4301.10	4207.44	1780.42	14570195.90	1773007.44	0.45	
10658.00	90.49	337.20	6526.04	4384.56	4293.09	1744.18	14570281.55	1772971.20	0.35	
10748.00	90.55	337.10	6525.23	4465.40	4376.02	1709.23	14570364.48	1772936.25	0.13	
10841.00	90.55	336.21	6524.33	4548.56	4461.40	1672.38	14570449.86	1772899.40	0.96	
10930.00	90.37	335.66	6523.62	4627.65	4542.66	1636.09	14570531.12	1772863.11	0.65	
11023.00	90.49	334.81	6522.92	4709.77	4627.11	1597.14	14570615.57	1772824.16	0.92	
11116.00	90.55	335.11	6522.08	4791.67	4711.36	1557.78	14570699.82	1772784.80	0.33	
11208.00	90.55	335.79	6521.19	4873.06	4795.04	1519.55	14570783.50	1772746.57	0.74	
11298.00	90.68	335.65	6520.23	4952.88	4877.08	1482.55	14570865.54	1772709.57	0.21	
11391.00	91.11	337.23	6518.78	5035.88	4962.31	1445.38	14570950.77	1772672.40	1.76	
11484.00	90.62	336.87	6517.37	5119.33	5047.94	1409.12	14571036.40	1772636.14	0.65	
11577.00	90.55	335.87	6516.42	5202.29	5133.14	1371.85	14571121.60	1772598.87	1.08	
11669.00	91.05	335.46	6515.14	5283.84	5216.95	1333.94	14571205.41	1772560.96	0.70	
11762.00	90.68	336.68	6513.73	5366.57	5301.95	1296.22	14571290.41	1772523.24	1.37	
11855.00	90.55	335.83	6512.74	5449.45	5387.07	1258.78	14571375.53	1772485.80	0.92	
11948.00	90.62	335.60	6511.79	5531.93	5471.84	1220.53	14571460.30	1772447.55	0.26	
12041.00	90.74	336.06	6510.68	5614.49	5556.68	1182.46	14571545.14	1772409.48	0.51	
12133.00	90.68	337.23	6509.54	5696.75	5641.13	1145.99	14571629.59	1772373.01	1.27	
12226.00	90.31	336.83	6508.74	5780.19	5726.75	1109.70	14571715.21	1772336.72	0.59	
12319.00	90.12	336.69	6508.39	5863.44	5812.21	1073.00	14571800.67	1772300.02	0.25	
12412.00	90.43	336.02	6507.94	5946.39	5897.40	1035.70	14571885.86	1772262.72	0.79	
12505.00	90.25	336.00	6507.39	6029.09	5982.36	997.89	14571970.82	1772224.91	0.19	
12597.00	90.31	334.56	6506.94	6110.36	6065.93	959.42	14572054.39	1772186.44	1.57	
12690.00	90.12	335.81	6506.59	6192.44	6150.34	920.39	14572138.80	1772147.41	1.36	
12783.00	90.31	336.78	6506.24	6275.35	6235.49	883.00	14572223.95	1772110.02	1.06	
12876.00	90.31	336.72	6505.74	6358.59	6320.94	846.29	14572309.40	1772073.31	0.06	
12968.00	90.31	338.05	6505.24	6441.38	6405.86	810.91	14572394.32	1772037.93	1.45	
13061.00	90.31	337.81	6504.74	6525.46	6492.04	775.97	14572480.50	1772002.99	0.26	
13154.00	89.75	337.42	6504.69	6609.32	6578.04	740.55	14572566.50	1771967.57	0.73	
13247.00	90.12	336.20	6504.80	6692.60	6663.52	703.93	14572651.98	1771930.95	1.37	
13340.00	89.75	336.93	6504.90	6775.71	6748.85	666.95	14572737.31	1771893.97	0.88	
13432.00	89.91	335.91	6505.17	6857.82	6833.16	630.14	14572821.62	1771857.16	1.12	
13525.00	89.94	337.28	6505.30	6940.95	6918.51	593.20	14572906.97	1771820.22	1.47	
13618.00	89.82	334.30	6505.49	7023.47	7003.32	555.07	14572991.78	1771782.09	3.21	
13711.00	90.37	337.32	6505.34	7106.01	7088.14	516.97	14573076.60	1771743.99	3.30	
13804.00	89.94	336.01	6505.09	7189.19	7173.54	480.13	14573162.00	1771707.15	1.48	

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## 5D Survey Report

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MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
13896.00	90.25	333.57	6504.93	7270.08	7256.77	440.95	14573245.23	1771667.97	2.67	
13961.00	90.18	334.75	6504.69	7326.89	7315.27	412.62	14573303.73	1771639.64	1.82	Last WFT SVY
13984.00	90.18	334.75	6504.62	7347.11	7336.07	402.81	14573324.53	1771629.83	0.00	PTB

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